## **CLAIM AMENDMENTS:**

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(currently amended) A method for bit stream decoding of a received 1. bit stream having a number of consecutive samples, the method comprising the steps of:

- a) sampling a bit in the received bit stream to generate at least two sample values of said bit:
- a)b) defining a detection window of sample values which are used to determine a value of said bit having a number of samples;
  - b) positioning said detection window at certain positions on the bit stream in order to subtend certain samples with respective sample values;
  - c) applying a majority voting to said sample values within said detection window;
  - d) generating a value of said sampled bit in dependence on the results of step c): and
- d)e) decoding the bit stream in dependence on the results of step e);using the and e) generating respective bit values values following generated in step d).
- (original) The method of claim 1, wherein said detection window 2. comprises an odd number of samples.
- (original) The method of claim 1, wherein said detection window is 3. positioned at an expected edge between two bit cells of the bit stream to overlap at least one sample of a first bit cell and at least one sample of a subsequent bit cell, having respective sample values, in order to perform bit edge detection.

- 4. (original) The method of claim 1, wherein said detection window is centered on an expected center of a bit cell of the bit stream to only overlap samples of said bit cell for detecting a bit value of said bit cell.
- (original) The method of claim 4, wherein glitches or spikes in the bit stream are filtering out.
- (original) The method of claim 4, wherein said detection window is
  positioned on an expected center of said bit cell in dependence on a
  predetermined offset-parameter and in dependence on a
  predetermined parameter specifying a number of samples in said
  detection window.
- 7. (cancelled)
- 8. (cancelled)
- (currently amended) A device for decoding a <u>received</u> bit stream having a number of consecutive samples, the device comprising:

means for sampling a bit in the received bit stream to generate at least two sample values of said bit;
means for positioning defining a-predefined detection window of sample values which are used to determine a value of said bit at certain positions in the bit stream, the detection window being predefined to overlap a number of samples, said detection window being positioned in such a way as to span certain samples with respective sample values; means for applying majority voting to said sample values contained within said detection window;

means for generating a value of said sampled bit in dependence on results of said voting; and means for decoding the bit stream in dependence on said majority voting; and means for generating respective using the generated bit values in response to said decoding of the bit stream.

- 10. (original) The device of claim 9, wherein said detection window comprises an odd number of samples.
- 11. (original) The device of claim 9, wherein said detection window is positioned at an expected edge between two bit cells of the bit stream to overlap at least one sample of a first bit cell and at least one sample of a subsequent bit cell, having respective sample values, in order to perform bit edge detection.
- 12. (original) The device of claim 9, wherein said detection window is centered on an expected center of a bit cell of the bit stream to only overlap samples of said bit cell for detecting a bit value of said bit cell.
- 13. (original) The device of claim 12, wherein glitches or spikes in the bit stream are filtering out.
- 14. (original) The device of claim 12, wherein said detection window is positioned at an expected center of said bit cell according to a predetermined offset-parameter and according to a predetermined parameter specifying a number of samples in said detection window.
- 15. (currently amended) One of a number of nodes of A node in a communication system, the node comprising the device of claim

9the nodes being connected to a communication media for transmitting data among the nodes, the data being transmitted across the communication media in the form of a bit stream, the bit stream comprising a number of consecutive samples, wherein the node comprises a bit stream decoding device according to claim 9 for decoding the bit stream received from the communication media.

## 16. (cancelled)

- 17. (currently amended) A data storage medium having machine encoded instructions stored thereon for executing the method of claim-1which are executable by at least one of a computer and a microprocessor, the executable instructions comprising the steps of:
  - a) sampling a bit in a bit stream to generate at least two sample values of the bit;
  - b) defining a detecting window of sample values which are used to determine a value of the bit:
  - c) applying majority voting to the sample values within the detection window; and
  - d) generating a value of the sampled bit in dependence on results of step c).